

## Math 10 Unit 2 In-Class Assignment (Out of 33)

- Please make sure to complete every question. If you need any help you can ask me during class or come in at lunch hour for extra help.
- Please note that any material covered on this assignment or in our notes for sections 3.3 to 3.8 may be assessed on your Unit Test.
- All work must be done on a separate page. Please circle your final answer for each question. Attach this sheet to your answer page.
- Show your work where possible, which is any question having more than one step; marks may be deducted otherwise.

### SECTION 3.3

1. Multiply the monomial by the polynomial (Value 2)
  - a.  $2ab(3a^2b^3 + 3a - 6b)$
2. Factor each of the following using common factoring (Value 4)
  - a.  $3g + 6$
  - b.  $8d + 12d^2$
  - c.  $6 - 12z + 18z^2$
  - d.  $-20c^4d - 30c^3d^2 - 25cd$

### SECTION 3.5

3. Expand and Simplify. (Value 6)
  - a.  $(c + 3)(c + 1)$ .....show diagram of algebra tiles
  - b.  $(a + 2)(a - 3)$ .....use area model
  - c.  $(x + 40)(x - 25)$ .....use FOIL
4. Factor each of the following (Value 2)
  - a.  $x^2 - 8x + 7$
  - b.  $a^2 + 7a - 18$

### SECTION 3.6

5. Expand and Simplify (Value 2)
  - a.  $(5e + 3)(2e + 4)$
6. Factor each of the following (Value 4)
  - a.  $8p^2 - 18p - 5$
  - b.  $4h^2 - 2h - 20$

### SECTION 3.7

7. Expand and simplify, if possible. (Value 4)
  - a.  $(3k + 4)(k^2 - 2k - 7)$
  - b.  $(-2ab^2 - 3a)(5a^2b - 2b^4 + a^2b)$

### SECTION 3.8

8. Factor each of the following perfect trinomials (Value 2)
  - a.  $36x^2 + 12x + 1$
  - b.  $16 - 56x + 49x^2$
9. Factor each of the following, using difference of squares (Value 2)
  - a.  $81m^2 - 49$
  - b.  $162v^4 - 2w^4$

### Overview of factoring....

10. Factor each of the following using the best factoring technique....you need to figure it out! (Value 5)
  - a.  $9x^2 + 12x + 4$
  - b.  $100m^2 - 121$
  - c.  $5g^3 + 25g^2$
  - d.  $6h^2 - 13h - 8$
  - e.  $a^2 - 36a + 99$